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Federal Communications Commission  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of

Carriage of Digital Television Broadcast  
Signals

Amendments to Part 76  
of the Commission's Rules

Local Broadcast Signal Carriage Issues

Application of Network Non-Duplication,  
Syndicated Exclusivity and Sports Blackout  
Rules to Satellite Retransmissions of  
Broadcast Signals

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CS Docket No. 98-120

CS Docket No. 00-96

CS Docket No. 00-2

COMMENTS OF NAB/MSTV/ALTV

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## Summary

The National Association of Broadcasters, the Association for Maximum Service Television, Inc. and the Association of Local Television Stations, Inc., in response to the Commission's *Further Notice*, provide additional support for the Commission's adoption of a rule requiring carriage of digital television (DTV) signals during the transition from analog to digital broadcasting. NAB/MSTV/ALTV reiterate their view that cable carriage of DTV signals is mandated by the plain terms of the Communications Act. Even if the Commission has discretion to consider whether to adopt such a rule, the record provides compelling support for it to do so.

For almost 15 years, the Commission has sponsored a public/private partnership to move American television into a digital future. Congress endorsed this goal, and asked that the transition be completed as quickly as possible, but without substantially disrupting consumers. Broadcasters have fulfilled their role in the transition; they are rapidly putting DTV signals on the air. But a rapid transition cannot be achieved through the efforts of broadcasters alone.

The *Further Notice* asked, among other things, for evidence of the effect that a DTV cable carriage requirement would have on the pace of the transition. NAB/MSTV/ALTV submit a study by Dr. Joseph A. Kraemer and Richard O. Levine that examines the structure of the American broadcasting industry and the factors that affect consumer acceptance of new technologies.

The Kraemer/Levine Report shows that the television set/programming supply chain is fragmented, and no one part of the industry is dominant and able on its own to

drive the transition. If broadcasters are left to be the sole driving force of the transition, they estimate it may take 20 or more years for the 85% penetration target set by Congress to be achieved.

A transition of that length puts numerous policy goals at risk. A long transition, with years of investment without return in digital facilities and programming, will inevitably place local broadcast service at risk, particularly for smaller broadcasters. Doing so would jeopardize Congress' goal of preserving and strengthening the system of diverse local free broadcasting.

Cable carriage of DTV programming, Kraemer and Levine conclude, would dramatically shorten the transition, permitting the return of analog spectrum perhaps a decade earlier than a transition without early cable carriage. They explain that the access to a mass audience the cable carriage of DTV signals would permit will begin a "virtuous circle" of increased investments in digital programming, with resulting increased demand for digital receivers. That would lead to reduced prices for digital sets, further increasing demand for both sets and programming. DTV carriage during the transition, therefore, is the most effective means of achieving Congress' goals set forth in the Cable Act, the Telecommunications Act, and the Balanced Budget Act.

The Commission must conclude that, in the absence of must carry rules, many – if not most – DTV signals will be denied cable carriage. The incentives that Congress found cable operators had to deny carriage to local broadcast signals have strengthened in the years since must carry was adopted. The enhanced services DTV makes possible – all of which directly compete with cable services – result in greater disincentives for cable to enable digital broadcasters to obtain access to their audience.

NAB/MSTV/ALTV also submit a survey of television stations concerning carriage of DTV signals. Nearly 400 commercial stations participated in this survey, 60 of which are on the air with a DTV signal. Of those, only eight have reached any agreement with a cable operator for carriage of their DTV signal, and only five of those have obtain carriage for all free parts of their digital service. A station reported that “[b]oth AT&T and Time Warner refused to discuss any language for digital carriage.”

Requiring carriage of DTV signals during the transition would advance precisely the same interests that Congress sought to achieve in the Cable Act. Without cable carriage, it will be impossible for broadcasters to develop innovative programming for DTV. Even if some DTV signals might ultimately be carried, the stations left out would suffer and their service to the public would be reduced. Must carry for DTV signals will also encourage the rapid development of the new and innovative services that Congress expected and it would foreclose cable operators from misusing their gatekeeper facilities. Congress wanted the Commission and the public to determine the appropriate level of broadcast service – not the local cable operator – and that principle is equally valid in developing DTV.

While any responses by cable operators to the Commission’s request for updated capacity data remain unavailable, publicly available data confirms what everyone already knows: cable capacity has exploded as cable systems rush to add digital capability. AT&T, for example, has now upgraded *all* of its cable systems. There can be no argument, therefore, that carriage of digital signals would create any undue burden on most cable systems.

Indeed, NAB/MSTV/ALTV submit an updated chart showing the projected

“burden” of carrying analog and digital television signals during the transition. Even at the height of the transition, when all stations will be transmitting both analog and digital signals, their carriage would use *less* cable capacity than carriage of analog signals only did in 1993 when must carry went into effect. Since that “burden” was found acceptable by the Supreme Court in *Turner II*, no argument can be made that a rule occupying less cable capacity would raise any constitutional question.

The Commission also asked for comment on how it should define “program-related” for DTV signals. When the Commission decided to use the copyright test for program-relatedness established in the *WGN* case for analog carriage, it recognized that new technology might require it to reexamine that conclusion. The greatly enhanced capabilities of digital signals now should lead the Commission to abandon the *WGN* test. Foreseeable digital services that are clearly related to the program service a station offers to its community would raise difficult questions under *WGN*. The Commission instead should require carriage of all non-subscription material that adds to, supplements, or relates to the program service of a television station.

Finally, the Commission sought comment on the DTV carriage obligations it should impose on satellite carriers. Congress directed the FCC to craft rules that require satellite carriers, which carry the signal of any station in a television market to carry all of them. Section 338(g) requires that those obligations be comparable to those imposed on cable systems.

The Commission should, therefore, require satellite carriers, which carry the signals of stations in a market to carry both the analog and digital signals of all stations in that market. As the Commission itself commented in a recent court filing, the fact that

the Satellite Home Viewer Improvement Act only requires carriage if a satellite carrier decides to provide local-into-local service obviates any First Amendment inquiry.

Broadcasters have been actively working towards the transition to digital television for years. To date, the cable industry's position seems to have been: "call us when you're done." The objectives Congress sought to achieve when it adopted must carry and when it set the rules for the digital transition cannot be achieved if cable is allowed to "sit this one out." The Commission should promptly adopt a rule requiring cable and satellite operators to carry the digital signals of local commercial television stations.

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	)	

**COMMENTS OF NAB/MSTV/ALTV**

The National Association of Broadcasters ("NAB"), the Association for Maximum Service Television, Inc. ("MSTV") and the Association of Local Television Stations, Inc. ("ALTV")<sup>1</sup> hereby file comments in response to the *Commission's Further Notice of Proposed Rule Making* in the above-captioned proceeding on carriage of digital television broadcast signals.

**I. Introduction and Background**

In 1987 the FCC, led by Chairman Patrick, initiated an historic rule making proceeding to enable America's free, universal television broadcasting system – for years the envy of the world and the modern day hearth for American families – to upgrade to

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<sup>1</sup> NAB serves and represents the American broadcast industry as a nonprofit, incorporated association of radio and television stations and broadcast networks. MSTV represents nearly 400 local television stations on technical issues relating to analog and digital television services. ALTV is a nonprofit trade association representing local television broadcasters across this country.



advanced television technology. America's free mass information and entertainment medium would thus be able to maintain its status as the best universally available television system in the world and remain competitive with the coming technology advances in the broader "pay" video marketplace of cable and satellite. This process took ten years, an historic private/public partnership to test proposed systems and develop transition policies (the FCC's Advisory Committee on Advanced Television), and tens of thousands of hours of work by industry volunteers and FCC personnel. The development of Advanced Television (ATV) was fostered by successive FCCs, with the process producing three *Report and Orders* on ATV service rules and policies by 1992.<sup>2</sup>

That same year, in the 1992 Cable Act,<sup>3</sup> Congress determined that the cable television industry had become a monopoly gatekeeper to local television audiences and was denying local television stations carriage and access to cable subscribers, who then represented 59.3% of total television households. Congress further determined that preservation of the free over-the-air television system,<sup>4</sup> for the benefit of cable and non-cable households, required mandating cable systems to carry all local television stations

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<sup>2</sup> *First Report and Order*, MM Docket No. 87-268 (rel. Sept. 21, 1990), 5 FCC Rcd 5627 (1990); *Second Report and Order/Further Notice of Proposed Rule Making*, MM Docket No. 87-268 (rel. Apr. 9, 1992), 7 FCC Rcd 3340 (1992); *Memorandum Opinion and Order/Third Report and Order/Third Further Notice of Proposed Rule Making*, MM Docket No. 87-268 (rel. Sept. 17, 1992), 7 FCC Rcd 6924 (1992).

<sup>3</sup> Cable Television Consumer Protection & Competition Act of 1992, Pub. L. No. 102-385 (Oct. 5, 1992) ("1992 Cable Act").

<sup>4</sup> The other two interests served by the must carry rules were insuring a multiplicity of outlets and a competitive market for programming. *Turner Broadcasting System, Inc. v. FCC*, 512 U.S. 622 (1994) ("*Turner I*"); *Turner Broadcasting System, Inc. v. FCC*, 520 U.S. 180 (1997) ("*Turner II*").

up to one-third of a cable system's capacity.<sup>5</sup> Without access to the audience, Congress reasoned, advertising-supported stations could not remain viable. And, in the must carry provisions of the 1992 Cable Act, Congress spoke of the expected "advanced television" signals and directed the FCC "at such time as the Commission prescribes modifications of the standards for television broadcast signals" to initiate a rulemaking to ensure cable carriage of the new advanced television signals.<sup>6</sup>

At the start of the Clinton Administration in 1993, the FCC re-visited the transition's service rules and policies, which ultimately remained largely the same as before except for the end date. The plan which had developed over several years was to gradually transition the existing television broadcasting system to digital technology by means of a temporary transitional DTV channel, thus allowing continuation of side-by-side analog broadcasts so that the public's existing analog television sets would not abruptly become obsolete. Once an appropriately large number of viewers had new DTV sets, analog service would be turned off. Congress, in the 1996 Telecommunications Act specifically endorsed the FCC's plan initially to limit eligibility for new advanced television licenses to local broadcasters and permittees, thus enabling the transition to digital for the entire broadcasting system.<sup>7</sup> That Act also ordered that, after the transition, the analog channels would be reclaimed by the government. 47 U.S.C. §§ 336(a)(1)(c).

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<sup>5</sup> Cable carriage of local broadcast signals in the first year of the must carry rules averaged less than 14% of cable capacity, a figure which steadily decreased with subsequent growth in cable capacity.

<sup>6</sup> Section 614(b)(4)(B) of the Act.

<sup>7</sup> Telecommunications Act of 1996, Pub. L. 104-104 (Feb. 8, 1996).

The process culminated in the adoption of the DTV standard in December 1996,<sup>8</sup> and of DTV service rules and transition policies and of a new DTV Table of Allotments in April 1997.<sup>9</sup> Development of the table was extremely difficult, as the plan called for fitting temporary transitional channels (which replicated as closely as possible each station's existing service contours) into the existing VHF and UHF television bands. New DTV licensees were ordered to be operational on an accelerated timetable (starting two years from authorization rather than the previously expected five years, with some large market stations "enlisted" to begin DTV broadcasts six months before that). The transition had earlier been anticipated to take 15 to 20 years, but the target date for the cessation of analog (NTSC) broadcasting was pushed up to 2006 in the FCC's decision on transition policies, given a perceived competitive urgency for broadcasters and technological advances expected to lower costs and speed the transition.<sup>10</sup>

In July of 1997, Congress, in the Balanced Budget Act,<sup>11</sup> codified this early end date of 2006 for the transition and analog service, building in market-by-market exceptions where DTV set penetration and access to DTV signals did not reach 85% of households. Congress clearly had other public policy goals to be served by early return of the analog channels, both in terms of auction revenues and provision of limited spectrum for new communications uses.

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<sup>8</sup> *Fourth Report and Order*, MM Docket No. 87-268 (rel. Dec. 27, 1996), 11 FCC Rcd 17771 (1996).

<sup>9</sup> *Fifth Report and Order*, MM Docket No. 87-268 (rel. Apr. 21, 1997), 12 FCC Rcd 12809 (1997) ("Fifth Report and Order"); *Sixth Report and Order*, MM Docket No. 87-268 (rel. Apr. 21, 1997), 12 FCC Rcd 14588 (1997) ("Sixth Report and Order").

<sup>10</sup> *Fifth Report and Order* at ¶ 99.

<sup>11</sup> Balanced Budget Act of 1997, Pub. L. 105-33 (Aug. 5, 1997).

To date, however, the Commission has not taken the steps needed to bring the digital transition to the rapid end that Congress explicitly desired. Despite FCC calls for a standard for cable set top boxes to work with DTV sets, a complete standard remains only a goal. While the Commission has begun a proceeding to consider whether to require DTV reception capability in all new sets,<sup>12</sup> tens of millions of analog-only sets continue to be sold, ultimately delaying the end of the transition.

Most significantly, the Commission has not taken steps to ensure carriage of broadcast digital signals on cable systems and DBS carriers. It asked for comments on cable must carry rules in 1998, but more than two years elapsed before it adopted even a partial decision. The *Report and Order* the Commission ultimately adopted largely failed even to examine the evidence submitted on the issues surrounding digital carriage.<sup>13</sup> Instead, the Commission adopted a *Further Notice*, asking many of the same questions it had in 1998.<sup>14</sup>

Thus, it is now for this new Commission, under new leadership, to grapple with the key question here presented: should the DTV transition be accelerated from the almost stalled current pace, or should it be allowed to meander down the current path taking far longer, likely more than 20 years more.

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<sup>12</sup> *Report and Order and Further Notice of Proposed Rule Making*, MM Docket No. 00-39 (rel. Jan. 19, 2001).

<sup>13</sup> *First Report and Order*, CS Docket No. 98-120, CS Docket No. 00-96, CS Docket No. 00-2 (rel. Jan. 23, 2001) (“Report and Order”).

<sup>14</sup> *Further Notice of Proposed Rule Making*, CS Docket No. 98-120, CS Docket No. 00-96, CS Docket No. 00-2 (rel. Jan. 23, 2001) (“Further Notice”).

This proceeding presents that policy choice for the Commission.<sup>15</sup> DTV must carry will open up mass audience access to on-air DTV broadcasts, thus enabling a chain reaction of more sets and more programming, driving the market to the “tipping point” where consumer demand will complete the transition.

NAB/MSTV/ALTV demonstrate that DTV carriage is necessary to the swift transition that Congress mandated. With exploding cable capacity, mandatory carriage of both DTV and analog signals of local broadcasters during the transition will burden cable no more than Congress expected and authorized and less than mandatory analog carriage did in 1993. DTV must carry furthers the same governmental interests that analog must carry served, is fully supported by the record Congress assembled, and is bolstered by the additional governmental interest in a swift and successful DTV transition.<sup>16</sup>

If the FCC does not adopt DTV must carry rules during the transition, most DTV broadcast signals will not be carried by cable, and the DTV transition will drag out far beyond the timeframe directed by Congress. Further, the vitality of the free over the air broadcasting system will be diminished, for some stations to the point of marginal

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<sup>15</sup> NAB/MSTV/ALTV stand behind our legal arguments that, in fact, the Commission does not have a policy decision as to DTV must carry, but, rather, that the Cable Act mandates carriage of all local broadcast signals, and makes no distinction in its basic command between analog and digital signals. That issue is currently before the Commission in our request for reconsideration of the *Report and Order*. NAB/MSTV/ALTV Petition for Reconsideration, CS Docket No. 98-120 (filed Apr. 25, 2001).

<sup>16</sup> NAB/MSTV/ALTV maintain that the FCC’s tentative conclusion in the *Report and Order* at ¶ 3, that “based on the existing record evidence, a dual carriage requirement appears to burden cable operators’ First Amendment interests substantially more than is necessary to further the government’s substantial interests” is not supported by reasoned decision making: the *Report and Order* contains *no* discussion of the record evidence, of the burden on cable nor of the government’s interests. It thus cannot be sustained and cannot inform the Commission’s decision making on the *Further Notice*.

existence or extinction, by lack of access to two-thirds or more of their audience (resulting in a lack of incremental DTV advertising revenue and inability to build a DTV business), and the cost of operating two signals for an extended period. As anticipated by Congress, without government restraint cable will exercise its gatekeeper power to deny carriage to and disadvantage broadcast competitors,<sup>17</sup> particularly those most vulnerable, as it did before must carry was enacted.

If, instead, the FCC adopts DTV must carry, the transition can be re-ignited and move towards an accelerated completion, as desired by Congress and to the benefit of the American public. The burden on cable of dual must carry will be small if not *de minimis* given the explosion in cable capacity, and even that small burden will be self-limiting and extinguished with a more rapid transition. Thus, the key question remains: what kind of DTV transition does the FCC (and Congress) want.

NAB/MSTV/ALTV, as noted above, continue to contend that the plain language of the 1992 Cable Act requires the Commission to adopt rules facilitating carriage of the digital signals of local commercial television stations. The Commission squarely rejected cable arguments that section 614(b)(4)(B) of the Act requires carriage of DTV signals only after the conclusion of the transition.<sup>18</sup> Therefore, even if the Commission should conclude that it has discretion concerning DTV carriage during the transition, the exercise of that discretion must respect the underlying congressional mandate of DTV carriage.

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<sup>17</sup> See H.R. Rep. No. 102-628 at 57 (“The use by one competitor of its gateway facilities to block access to the other competitors offerings is not an appropriate strategy and will, if unchecked, harm the public interest.”)

<sup>18</sup> *Report and Order* at ¶ 15.

In that case, the Commission would have discretion to fashion must carry rules that would achieve Congress' objectives, but perhaps in a manner somewhat different than Congress decreed with respect to carriage of analog signals. The Commission could, for example, consider steps that would reduce the burden of carriage on systems that had not expanded significantly since analog must carry began. It might also consider "triggering" DTV carriage obligations only when a certain percentage of local commercial stations had begun broadcasting in digital. In earlier comments, broadcasters provided examples of flexible carriage provisions for the Commission's consideration.<sup>19</sup> While some of those specific proposals might no longer be valid, it would be appropriate for the Commission to consider similar proposals.

## **II. DTV Must Carry Is Necessary To Achieve a Swift and Successful DTV Transition and Return of Analog Spectrum.**

In further inquiring about the likely role and necessity of DTV must carry in the course and timing of the DTV transition, the *Further Notice* asks for a precise plan for how and when the transition will be completed.<sup>20</sup> It asks when the analog spectrum is likely to be returned, under mandatory and non-mandatory dual carriage scenarios.<sup>21</sup> It asks for transition scenarios and the role digital must carry would play in affecting these scenarios. To answer these questions, NAB/MSTV/ALTV commissioned a report from Dr. Joseph S. Kraemer and Richard O. Levine, Esq., Directors at the consulting firm of

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<sup>19</sup> See Comments of MSTV, CS Docket No. 98-120 (filed Oct. 13, 1998) at 51-56; Reply Comments of MSTV, CS Docket No. 98-120 (filed Dec. 22, 1998) at 26-28; NAB Comments, CS Docket No. 98-120 (filed Oct. 13, 1998) at 35.

<sup>20</sup> *Further Notice* at ¶ 117.

<sup>21</sup> *Id.* at ¶ 118.

LECG, noted experts in the areas of economics and public policy, particularly with reference to market, technology and regulatory issues.<sup>22</sup>

The Kraemer/Levine Scenario Analysis presents scenarios of how the DTV transition would develop under various conditions. It analyzes what factors and conditions are necessary to move a transition such as the one now underway from analog to digital television broadcasting, involving as it does this specific mix of industry, public and government stakeholders and public policy objectives. The Kraemer/Levine Report concludes that

- (1) a DTV transition without assured mass market access (even with DTV broadcasters in operation) will take over 20 years more (the year 2020 is probably the *earliest* reasonable date for analog turn off to begin),
- (2) Non-intervention by the FCC puts simultaneously at risk multiple public policy goals including: preserving the free over-the-air television system, freeing spectrum for advanced mobile communications applications for business and consumers and enhancing spectrum auction revenues for the government,
- (3) Digital must-carry is the most effective policy initiative for purposes of accelerating the transition. Digital must-carry provides assured audience access that, in turn, will lead to advertiser support for free-to-air digital programming,
- (4) Such programming can trigger mutually reinforcing consumer demand for both digital receivers and more digital programming (*i.e.*, dual ‘virtuous circles’), and
- (5) If 2020 and beyond is not acceptable to begin analog turn-off, then intervention in the form of digital must-carry is mandatory.

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<sup>22</sup> “Implications of the Adoption of Digital Must-Carry on the Speed of the Broadcast DTV Transition: A Scenario Analysis,” June 11, 2001, attached hereto as Appendix A. (“Kraemer/Levine Report” or “Kraemer/Levine Scenario Analysis”). Curricula vitae are included with the report.



**A. DTV Must Carry Will Determine the Pace of the DTV Transition.**

As indicated above, the Kraemer/Levine Scenario Analysis analyzes the broadcast, cable, programming, and set manufacturing interrelationships and develops and analyzes DTV transition scenarios under various circumstances, specifically (1) a typical market adoption transition approach (resting on the mandated broadcaster build-out of DTV facilities), and (2) an accelerated transition involving focused actions on the part of government to break the vicious circle stalemating a rapid transition. The Kraemer/Levine Report concludes that the centerpiece, but not the only component, of an accelerated DTV transition scenario is digital must carry. They conclude that digital must carry (*i.e.*, full cable carriage) is the most effective policy initiative for purposes of transition acceleration.

The Kraemer/Levine Report confirms arguments we made in initial comments that, without the mass audience access to a full complement of DTV signals, the transition will not ignite quickly, and that, without access to the mass audience, broadcasters, beset by enormous costs, cannot survive in digital or analog. This was the central predicate of the 1992 Cable Act and of *Turner II*: that without access to the audience, broadcasters cannot survive and the robust free broadcasting system Congress sought to preserve for all American households will be diminished. This is as true for DTV as it was with analog broadcasting.

## **1. The Market-Driven DTV Scenario**

The Kraemer/Levine Report begins by constructing a baseline market adoption transition scenario.<sup>23</sup> They explain how the fragmented broadcast television industry support chain complicates the digital transition, with no dominant or vertically integrated player able by itself to drive the market and that, given the typical consumer adoption cycle, the DTV transition could take decades. They further analyze the mass consumer market of free over-the-air (OTA) broadcasting where access to the mass audience is the underpinning of the system. Because advertisers underwrite programming that reaches the mass audience the entire OTA system collapses if consumers cannot view the programs.<sup>24</sup>

For broadcast DTV, there must be a mass market of viewers available, or there will be no incentive to produce and distribute digital programming. That in turn will have a negative impact on the production of DTV sets since the mass market for sets will only occur in an environment where consumers conclude that the viewing experience justifies buying a DTV set. The “early market” for DTV will begin with “technophiles” and “videophiles,” but the total of those households probably will not exceed ten to fifteen percent of TV households, not nearly enough to qualify as a mass market. At this point, for example, fewer than 30,000 DTV sets with over-the-air reception capability have been delivered. Further, even that market is harmed by the absence of DTV carriage by cable and satellite, since “videophiles” are likely to subscribe to a multi-

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<sup>23</sup> Kraemer/Levine Report at 7-19.

<sup>24</sup> *Id.* at 9.

channel video program distributor and their inability to obtain DTV signals over those distributors creates a disincentive for even that group to acquire a digital receiver.

An absolutely critical challenge for set manufacturers will be moving from the early market to the mass market. At that point, the market will “tip” from a supply-driven early market to a self-sustaining mass market.<sup>25</sup> The challenge for digital set manufacturers thus will be rolling from the early market to the mass market with increasing momentum and no marketing stall. Two factors will affect development of the mass market. They are (1) buyer perception of value, and (2) buyer perception of risk. From a consumer’s perspective, the critical factor in determining value is content, *i.e.*, programming. Which comes first, the programming or the set, is the proverbial “chicken and egg” problem. The critical point is that the market-driven programming-set interaction will take years, probably decades, to develop to the point where DTV constitutes a mass consumer market.<sup>26</sup>

The Kraemer/Levine Report then explains that mass market access is the prerequisite for advertisers to pay for production of digital programming. Without a potential mass-market audience for OTA DTV, programmers have a reduced incentive to develop, and the networks to invest in, the advanced digital programming that will attract DTV set purchasers. They contrast the DTV situation with the introduction of color television, which was less complex than DTV (for example, no backwards compatibility problem) and which had a dominant player, RCA, which was the dominant provider of color televisions *and* color programming. This, they explain, provides a precedent to

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<sup>25</sup> See *id.* at 10 and Figure 2.

<sup>26</sup> *Id.* at 12.

understand the “virtuous circle” of content creation and mass market receiver penetration (*i.e.*, content leading to set sales, leading to more and more of both). Nonetheless, from introduction of color to 85% penetration took 27 years.

The Kraemer/Levine Report concludes that under typical baseline assumptions, the transition from analog to digital will take over 20 years for the first markets to reach 85% penetration and begin analog turn off.<sup>27</sup> They emphasize that, for DTV scenarios, it is important that: (1) no dominant player exists, and (2) government is relevant and can affect the speed and course of the DTV rollout. They summarize the DTV baseline scenario and its components in Figure 5 of the report, including the impact on spectrum auctions.

## **2. A Slow DTV Transition Places Preservation of Over-the-Air Broadcasting At Risk.**

As the FCC has acknowledged and the Kraemer/Levine Report notes, the future of the broadcast television industry rests on going digital.<sup>28</sup> But as their report also makes clear, a prolonged DTV transition leaves broadcasters anchored simultaneously in both the analog and digital worlds, hemorrhaging capital with no near-term return on their digital investment.<sup>29</sup>

Once a broadcast station has invested the \$1 million to \$5 million required for pass-through digital facilities, it must operate for an indeterminate amount of time both analog and digital transmission facilities. The longer the transition, the more expensive the dual operation becomes, with only analog revenues to support both operations.

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<sup>27</sup> *Id.* at 14, 17.

<sup>28</sup> *Fifth Report and Order* at ¶ 3; Kraemer/Levine Report at 23.

<sup>29</sup> Kraemer/Levine Report at 23.

Further, a long transition will require replacement of analog equipment, since the useful life of most equipment now in use will not extend over a long transition. Those additional capital costs will also adversely affect local stations.

Until and unless there is an audience that can view the digital programming, the capital and operating costs incurred by stations generate no return on investment and will affect adversely stations' financial performance. These costs and lack of return on investment are approximately the same for small stations and small market stations as for large stations in large markets. The smaller stations obviously have less staying power than do the larger stations. The vitality of the free broadcast television system will suffer as smaller stations, first, then larger ones, come under the financial strains of a drawn-out transition.<sup>30</sup> Reduced return on investment will result in cost reduction efforts such as less local programming or news, reduced capital budgets, and possibly reduction in on-air time.<sup>31</sup> Reductions in local service – the inevitable result of an extended digital transition – will put the Congress' goal in the 1992 Cable Act of preserving a robust free, over-the-air broadcast system at risk.<sup>32</sup> And the greatest risk for a reduction in television service will be in smaller and rural markets, which already have fewer video options.

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<sup>30</sup> The Kraemer/Levine Report states that a transition that takes over 20 years could have a material adverse impact on the financial performance of stations, especially those in smaller markets. *Id.* at 24.

<sup>31</sup> *Id.*

<sup>32</sup> This scenario also puts at risk the other important government interests identified by Congress, including promoting a multiplicity of outlets for dissemination of information and promotion of fair competition. Also at risk are the government goals of near-term high value spectrum auctions and recovery of spectrum for other important uses. *See id.* at 25-27.

### **3. An Accelerated DTV Transition Achieves All of Congress' Goals.**

This FCC can avoid the outcome described above by taking action to promote a *quick* transition which will achieve Congressional and FCC public policy goals of preserving the over the air broadcast system, bringing digital television to *all* American households and all-sized markets, reclaiming spectrum for advanced mobile wireless communications services and realizing substantial auction revenues for other important government uses. The Kraemer/Levine Report points to DTV must carry as the most effective government action in this regard.<sup>33</sup>

### **4. Digital Must Carry Will Accelerate the DTV Transition.**

Digital must carry can, according to the Kraemer/Levine Report, create relatively rapid change in a consumer mass market environment that otherwise can be expected to take two decades to approach 85% penetration.<sup>34</sup> It will, they conclude, act as a catalyst and trigger mutually beneficial actions in receiver manufacturing and programming.<sup>35</sup> Their report explains that, at present, we have a vicious circle where the lack of sets and of digital programming dooms the other, with no near-term end in sight. But, they maintain, digital must carry, by opening access to the mass audience can break the vicious circle and unlock the potential for “virtuous circles” as both programmers and consumer electronics companies define and exploit predictable market opportunities.

The Kraemer/Levine Report describes the normal course of events for consumer electronics manufacturers, where there would be a slow evolution to increasing set

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<sup>33</sup> *Id.* at 41.

<sup>34</sup> *Id.* at 28, 36-41.

<sup>35</sup> *Id.* at 36-38.

penetration.<sup>36</sup> As programming gradually became available, more consumers would buy sets, which would drive the price of sets down, which would continue to sell sets and reduce prices, which would lead to more programming on the supply side, which would sell more sets, leading to a larger and larger audience. This market-driven scenario could easily take 20 years or more.

Since advertising revenues are dependent on a program's ratings (and demographics), the expectation that advertising that runs on a digital broadcast will not have a meaningful audience provides no incentive for an advertiser to fund digital programming. Over time, an increasing number of homes will gain the ability to receive broadcast digital channels, but as long as viewership remains *de minimis*, so will expected incremental revenues from digital programming. Therefore, no advertising means no programming which leads to no demand for digital receivers, *i.e.*, a vicious circle.

According to the Kraemer/Levine Report, access to the mass audience would reverse the vicious circle and transform it into a "virtuous circle."<sup>37</sup> Reliable audience access, they say, will stimulate the advertising-programming interaction that will create the demand for sets which in turn will move set prices down, enabling a mass market. They believe that digital must carry provides the means to leverage the audience variable in the programming-set equation.

On the programming side, the business calculus as to investment in programming, particularly in the current economic climate, is dependent on program producers'

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<sup>36</sup> *Id.*

<sup>37</sup> *Id.* at 37.

perceptions about when digital programming will generate advertising revenue. In turn, the advertising revenue estimate is dependent on the likely viewing audience in mass market business of free OTA broadcasting. The economics of programming are driven by the size of the potential audience.

Digital must carry, according to the Kraemer/Levine Report, will provide the assurance of mass market audience access which in turn should trigger advertising support of program production throughout the complex programming supply chain. That in turn should have a beneficial impact on DTV receiver manufacturing. They note, however, that unless broadcasters can assure advertisers access to a mass market DTV audience, advertiser support for production of HDTV and other digital programming will be diminished and the demand for sets capable of reception of broadcast DTV will be concomitantly reduced.<sup>38</sup>

Thus, the Kraemer/Levine Report concludes that digital must carry will constitute the catalyst for acceleration of the transition from analog to digital broadcasting. It considers digital must carry the “center piece,” but not the only component, of an accelerated transition that could result in analog turn off in 2010-2012 period.<sup>39</sup>

**B. Cable Carriage of DTV Broadcasters Will Not Happen Without Must Carry.**

Cable’s constantly heard comment is that cable will carry DTV broadcasters that provide compelling programming.<sup>40</sup> That, as we have described above, is unlikely to

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<sup>38</sup> *Id.* at 38-39.

<sup>39</sup> *Id.* at 39.

<sup>40</sup> Robert Sachs, President & CEO, NCTA, Remarks at the Media Institute (Apr. 18, 2001) (*transcript available at* [www.ncta.com/press/press.cfm?PRid=117&show](http://www.ncta.com/press/press.cfm?PRid=117&show)).



happen unless there is some leverage, such as access to the mass market, to unlock the vicious circle preventing the spread of DTV. And since cable admits it will only carry certain broadcasters, it thus admits that it will not carry all or even most DTV broadcasters.

There is in fact a more obvious, and pernicious, reason why there will not be cable carriage of most DTV broadcasters: cable operators have increased competitive incentives not to carry DTV broadcasters, greater even than those found by Congress and approved by the Supreme Court in *Turner II*.

**1. Cable Has Increased Incentives Not To Carry DTV Broadcasters.**

Congress in the 1992 Cable Act made several findings regarding the economic incentives of cable system operators not to carry broadcast television channels.<sup>41</sup> It found that cable and broadcasting increasingly compete for advertising revenues. Cable carriage of local broadcasters assisted broadcasters to increase their audience, which would attract additional advertising revenues that otherwise might be diverted to the cable operator. Congress concluded, and the Supreme Court agreed, that “[t]here is a substantial likelihood that absent [a must carry requirement], additional local broadcast signals will be deleted, repositioned, or not carried.”<sup>42</sup> In addition, the Court affirmed the economic logic behind these findings: “Cable systems . . . have more systemic reasons

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<sup>41</sup> 1992 Cable Act at § 2(a).

<sup>42</sup> *Id.* at § 2(a)(15). In *Turner II*, the Supreme Court upheld these factual findings as supported by substantial evidence. *Turner II*, 520 U.S. at 200-206 (majority opinion) and at 228 (Breyer, J., concurring). The FCC is not free to disregard or reconsider findings of Congress. *Chevron U.S.A., Inc. v. Natural Resources Defense Council*, 467 U.S. 837, 842-843 (1984).